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ART UNIT	PAPER NUMBER
3724	<i>13</i>

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.

09/113,712

Applicant(s)

Helinski

Examiner

Clark F. Dexter

Group Art Unit

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☒ Responsive to communication(s) filed on Jul 27, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) 12-20 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-11 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on July 27, 2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/113,712 is acceptable and a CPA has been established. An action on the CPA follows.

It is noted that on page 2 of the amendment filed July 7, 2000 (paper #10), the change requested for claim 7, line 8 could not be entered since no such location exists. It appears that the change was intended for claim 7, line 2, so the change has been made at this location.

Claim Rejections - 35 USC § 112, 2nd paragraph

2. Claims 5-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, line 2, "the system aligns" renders the claim vague and indefinite as to what structure is being set forth, and it is suggested in line 2 to delete "assembly aligns", and in line 3 to change "to be" to --are--.

In claim 6, line 9, structural cooperation is not positively set forth for "the second die", and it is suggested in line 8 to change "being configured to receive" back to --receiving--, and in line 9 to insert --being configured to receive-- after "and" or the like.

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In claim 7, line 2, "being configured to receive" renders the claim vague and indefinite, and it is suggested to change it back to --receives--, and in line 3 to insert --is configured to receive-- after "and" or the like.

In claim 8, line 2, "the first die receiving passage" lacks positive antecedent basis.

In claim 10, line 2, "assembly aligns" renders the claim vague and indefinite as to what structure is being set forth, and it is suggested in line 2 to delete "assembly aligns", and in line 3 to change "to be" to --are--.

Claim Rejections - 35 USC § 102/103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-3 and 6-8 are rejected under 35 U.S.C. 102(b) as anticipated by Kranik et al. or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kranik et al. in view of Shimizu et al.

Claim 1

Kranik et al. discloses a system with every structural limitation of the claimed invention including: a first die (e.g., the die which includes surface 28) including a first aperture; a second die (e.g., 48) including a second aperture; a first housing (e.g., 14) including a first die passage receiving at least a portion of the first die (as shown in Fig. 1, the first die passage receives the entire first die); and a second housing (e.g., 42) including a second die passage receiving at least a portion of at least one of the first die and the second die (as shown in Fig. 1, the second die passage receives the entire second die). Further, the second die passage is configured to permit at least one of the first die and the second die to rotate therein; that is, “configured to permit at least one of the first die and the second die to rotate therein” is interpreted as defining the second die passage as being round thus permitting rotation therein. Kranik et al. meets this limitation in that the second die passage thereof (which receives component 48) is also round.

In the alternative, if it is argued that there is no disclosure that the second die passage is round, the Examiner takes Official notice that round dies fitted into round die passages are old and well known in the art as evidenced by Shimizu et al. and provide well known benefits including ease of manufacture and assembly. Therefore, it would have been obvious to one

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having ordinary skill in the art to make the second die passage as well as the second die of Kranik et al. round for the well known benefits including those described above.

Claim 2

Kranik et al. substantially meets the claim in that the second die passage is shown as being of such a width/diameter that either the first or second die can be received therein, and is long enough so that all of the second die and at least a portion of the first die can be received therein. But, Kranik et al. lacks the second die passage receiving at least a portion of the first die. However, the first and second die passages are the same size and the first and second dies are the same size. Thus, the first die (e.g., in the extended position shown in Figure 1) can clearly be received in the second die passage if the second die is moved downwardly within the second die passage. That is, Kranik et al. discloses all of the claimed structure, but lacks the manipulation of the structure such that the second die passage receives a portion of the first die. However, such a manipulation of the disclosed components is considered an intended use of the system disclosed by Kranik et al.

In the alternative, if it is argued that Kranik et al. does not explicitly teach that the dies are the same size and that the die passages are the same size, the Examiner takes Official notice that such a configuration is old and well known in the art and provides well known benefits including interchangeability of parts (i.e., any die can be pulled out of storage and used in either the first or second die passage). Therefore, it would have been obvious to one having ordinary skill in the art

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to make the die passages configured to receive either the first die or the second die by making the dies the same size and the die passages the same size for the well known benefits including that described above.

Claim 3

Kranik et al. discloses the first die passage and the second die passage which are configured to permit at least the first die to rotate therein. That is, "configured to permit at least the first die to rotate therein" is interpreted as defining the first and second die passages as being round thus permitting rotation therein. Kranik et al. meets this limitation in that the first and second die passages thereof are also round. Further, the first and second dies are shown as being the same size, and the first and second die passages are shown as being the same size, thus the second die passage is configured to permit rotation of the first die therein.

In the alternative, if it is argued that there is no disclosure that the first and second die passages are round, the Examiner takes Official notice that round dies fitted into round die passages are old and well known in the art as evidenced by Shimizu et al. and provide well known benefits including ease of manufacture and assembly. Therefore, it would have been obvious to one having ordinary skill in the art to make the first and second die passages along with the corresponding dies of Kranik et al. round for the well known benefits including those described above. Further in the alternative, if it is argued that Kranik et al. does not explicitly teach that the dies are the same size and that the die passages are the same size, the Examiner takes Official

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notice that such a configuration is old and well known in the art and provides well known benefits including interchangeability of parts (i.e., any die can be pulled out of storage and used in either the first or second die passage). Therefore, it would have been obvious to one having ordinary skill in the art to make the dies the same size and the die passages the same size for the well known benefits including that described above.

Claim 6

Kranik et al. discloses a punch and die assembly with every structural limitation of the claimed invention including: a first die (e.g., the die which includes surface 28) including a first aperture; a second die (e.g., 48) including a second aperture; a first housing (e.g., 14) including a first die passage receiving at least a portion of the first die (as shown in Fig. 1, the first die passage receives the entire first die); and a second housing (e.g., 42) including a second die passage being configured to receive at least a portion of the second die and at least a portion of the first die (as shown in Fig. 1, the second die passage receives the entire second die, and further the second die passage is shown as being the same size as the first die passage and thus is configured to receive the first die). Further, the second die passage is configured to permit at least one of the first die and the second die to rotate therein; that is, "configured to permit at least one of the first die and the second die to rotate therein" is interpreted as defining the second die passage as being round thus permitting rotation therein. Kranik et al. meets this limitation in that the second die passage thereof (which receives component 48) is also round.

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In the alternative, if it is argued that there is no disclosure that the second die passage is round, the Examiner takes Official notice that round dies fitted into round die passages are old and well known in the art as evidenced by Shimizu et al. and provide well known benefits including ease of manufacture and assembly. Therefore, it would have been obvious to one having ordinary skill in the art to make the second die passage as well as the second die of Kranik et al. round for the well known benefits including those described above.

Further in the alternative, if it is argued that Kranik et al. does not explicitly teach that the dies are the same size and that the die passages are the same size, the Examiner takes Official notice that such a configuration is old and well known in the art and provides well known benefits including interchangeability of parts (i.e., any die can be pulled out of storage and used in either the first or second die passage). Therefore, it would have been obvious to one having ordinary skill in the art to make the die passages configured to receive either the first die or the second die by making the dies the same size and the die passages the same size for the well known benefits including that described above.

Claim 7

Kranik et al. meets the claim in that the second die passage is shown as being of such a width/diameter that either the first or second die can be received therein, and is long enough so that all of the second die and at least a portion of the first die can be received therein. In the alternative, if it is argued that Kranik et al. does not explicitly teach that the dies are the same size

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and that the die passages are the same size, the Examiner takes Official notice that such a configuration is old and well known in the art and provides well known benefits including interchangeability of parts (i.e., any die can be pulled out of storage and used in either the first or second die passage). Therefore, it would have been obvious to one having ordinary skill in the art to make the die passages configured to receive either the first die or the second die by making the dies the same size and the die passages the same size for the well known benefits including that described above.

Claim 8

The first die passage and the second die passage of Kranik et al. are round and thus are configured to permit at least the first die to rotate therein. Again, the first die is the same size as the second die and thus the second die passage is configured to receive the first die (as well as permit rotation thereof). And again, in the alternative, if it is argued that Kranik et al. does not explicitly teach that the dies are the same size and that the die passages are the same size, the Examiner takes Official notice that such a configuration is old and well known in the art and provides well known benefits including interchangeability of parts (i.e., any die can be pulled out of storage and used in either the first or second die passage). Therefore, it would have been obvious to one having ordinary skill in the art to make the die passages configured to receive either the first die or the second die by making the dies the same size and the die passages the same size for the well known benefits including that described above.

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Claim Rejections - 35 USC § 103

6. Claims 4, 5, 8, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kranik et al. or in the alternative, over Kranik et al. in view of Shimizu et al.

Regarding claims 4, 5, 8 and 9, Kranik et al. lacks alignment marks on the respective dies and lacks a specific disclosure of the alignment accuracy of the die apertures. However, the Examiner takes Official notice that it is old and well known in the art, particularly the manufacturing art, to custom manufacture cooperating components and to provide alignment marks on the components to facilitate the desired alignment of the components. Therefore, it would have been obvious to one having ordinary skill in the art to provide alignment marks on the dies of Kranik et al., and to provide an accurate alignment of the die apertures for the well known benefits including that described above.

Regarding claim 11, Kranik et al. discloses a compression spring, but lacks the particular relationship between the spring, the punch and the housings. However, the Examiner takes Official notice that it is old and well known in the art to provide compression springs in any one of various known configurations to provide a biasing force to a punch. Therefore, it would have been obvious to one having ordinary skill in the art to provide the particular relationship between the spring, the punch and the housings as an alternative configuration for biasing the punch based on known considerations such as manufacturing considerations.

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Response to Arguments

7. Applicant's arguments filed July 7, 2000 have been fully considered but they are not persuasive.

In the paragraph bridging pages 2 and 3 of the amendment, particularly at the top of page 3, applicant argues the rejection to claims 6-11 under 35 USC 112, 1st paragraph, and states that "[T]he specification clearly describes and the drawings illustrate how the present invention operates as an alignment system." The Examiner does not disagree that such an alignment system is disclosed. However, the Examiner respectfully submits that an alignment system is not being claimed in claims 6-11 (note that such a rejection was not applied to claims 1-5 which set forth an alignment system). However, since the claims no longer recite a configuration in which the work area is blocked (i.e., the positive recitation of the at least a portion of the first die in the second die passage has been removed), this rejection has been obviated.

Regarding the prior art rejections, the Examiner's position is that regarding claims 1 and 3-11, the prior art clearly teaches or suggests the claimed invention. The only question may be whether the prior art meets "system" claimed in claim 2 since claim 2 is the only claim that explicitly requires that the second die passage receive at least a portion of the first die. However, the Examiner's position is that the structure of the system being defined is all found in the applied prior art, particularly Kranik et al. How the components are manipulated in the system is a matter of intended use of that system. It is emphasized that a method or process of aligning is not be claimed. Rather, what is being claimed is the structure contained in the system, wherein the

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structure can be manipulated to meet the claims, specifically claim 2 (the only claim which would require manipulation) and thus meets the claimed invention.

In the paragraph bridging pages 4-5 of the amendment, applicant argues that “Kranik et al. does not disclose the present invention since, among other things, Kranik et al. does not disclose a system for aligning dies in a punch and die assembly.” The Examiner respectfully disagrees since the prior art teaches or suggests all of the structure being claimed. The point that the prior art does not address alignment is of little consequence since “alignment” is considered an action being taken using the claimed structure, all of the claimed structure being disclosed or taught in the prior art.

In the paragraph at the bottom of page 5, applicant argues that “Kranik et al. does not disclose anywhere that alignment is or can be carried out. Along these lines, Kranik et al. does not describe or illustrate that the dies may rotate to align the die apertures.” However, the Examiner respectfully submits that the prior art discloses or teaches all of the claimed structure. Further, it’s not clear how the structure of the prior art is different than that of the present invention. For example, ultimately, the dies have to be installed in the die passages of the present invention in the same manner as the prior art; i.e., sufficiently fixed in place so that they do not move during a punching operation. This can be done by providing a friction fit which is known in the art. Providing a friction fit in the prior art would enable the dies to be rotatable in the die passages (i.e., with enough rotational pressure to overcome the friction) and thus meet the functional recitations in the claims.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark Dexter whose telephone number is (703) 308-1404.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Rinaldi Rada, can be reached at (703)308-2187.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-1148. The fax numbers for this group are: formal papers - (703)305-3579; informal/draft papers - (703)305-9835.



Clark F. Dexter
Primary Examiner
Art Unit 3724

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August 11, 2000